

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO.   | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |
|---|---------------|----------------------|-------------------------|-----------------|
| 10/696,844  | 10/29/2003    | Hua J. Xue           | XUE-0301                | 9142            |
| 75  | 90 01/31/2005 |                      | EXAM                    | INER            |
| Bo-In Lin<br>13445 Mandoli Drive<br>Los Altos Hills, CA 94022 |               |                      | SANDY, ROBERT JOHN      |                 |
|   |               |                      | ART UNIT                | PAPER NUMBER    |
| ,   | , •           |                      | 3677                    |                 |
|   |               |                      | DATE MAILED: 01/31/2005 |                 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| - '   |   |   |   | ۸ |  |  |  |  |
|---|---|---|---|---|--|--|--|--|
|   |   | Application No.   | Applicant(s)  |   |  |  |  |  |
| 2   |   | 10/696,844  | XUE ET AL.  |   |  |  |  |  |
| <b>♦</b> Office Action Summary  |   | Examiner  | Art Unit  |   |  |  |  |  |
|   |   | Robert J. Sandy   | 3677  |   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply |   |   |   |   |  |  |  |  |
| A<br>T<br>-   | SHORTENED STATUTORY PERIOD FOR REPLY HE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. | : |  |  |  |  |
| Statu   | ıs  |   |   |   |  |  |  |  |
| 1   | N Responsive to communication(s) filed on 29 Oc   | ctober 2003.  |   |   |  |  |  |  |
| 2a  | <u> </u>  |   |   |   |  |  |  |  |
| 3   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |   |   |  |  |  |  |
|   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |   |   |  |  |  |  |
| Disp  | osition of Claims   |   |   |   |  |  |  |  |
| 5<br>6<br>7   | Claim(s) 1-26 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  Claim(s) is/are allowed.  Claim(s) 1-26 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or   | vn from consideration.  |   |   |  |  |  |  |
| Appl  | ication Papers  |   |   |   |  |  |  |  |
| 10  | The specification is objected to by the Examine  The drawing(s) filed on 29 December 2003 is/a  Applicant may not request that any objection to the confidence of the december drawing sheet(s) including the correction.  The oath or declaration is objected to by the Examine  | re: a)⊠ accepted or b)⊡ object<br>drawing(s) be held in abeyance. Sec<br>ion is required if the drawing(s) is ob  | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).                            |   |  |  |  |  |
| Prior   | ity under 35 U.S.C. § 119   |   |   |   |  |  |  |  |
| 12  | Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  * See the attached detailed Office action for a list  | s have been received.<br>s have been received in Applicati<br>rity documents have been receive<br>u (PCT Rule 17.2(a)).   | on No ed in this National Stage   |   |  |  |  |  |
| Attact  | nment(s)  |   |   |   |  |  |  |  |
|   | Notice of References Cited (PTO-892)  | 4) Interview Summary  |   |   |  |  |  |  |
| 3) 🔲  | Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  | Paper No(s)/Mail Da<br>5) Notice of Informal P<br>6) Other:   | ate latent Application (PTO-152)  |   |  |  |  |  |

Art Unit: 3677

## **DETAILED ACTION**

## Specification

The disclosure is objected to because of the following informalities:

On page 5, line 29, "cylinder 125" should be changed to read as - - cylinder 135 - - since the "ball-holder" is reference by numeral "125".

On page 6, line 13, "our" should be changed to - - out - -.

On page 7, bridging lines 31 and 32, The phrase "In a pre In a preferred embodiment" should be change to read as - - In a preferred embodiment - - .

Appropriate correction is required.

The abstract of the disclosure is objected to because it exceeds more than 150 words. Currently, the Abstract contains 172 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited Correction is required. See MPEP § 608.01(b).

#### Claim Objections

Claim 10 is objected to because of the following informalities: In claim 10, line 3, "ball holding cup" should be changed to read as - - a ball holding cup - - .. Appropriate correction is required.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, as to the following:

Claim 26, there is no antecedent basis for "said step of unlocking...".

Art Unit: 3677

# Claim Rejections - 35 USC § 102

Page 3

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Martens (U. S. Patent No. 3,858,280). Martens ('280) discloses a security tag comprising: a tag body (10); an attaching means (14) for attaching said tag body to an article; and a locking means (balls 44, 46, 106) for releasably preventing said attaching means from being removed from said article wherein said locking means is provided for mechanically (via 60) or magnetically (via 120) released said attaching means for detaching said tag body from said article;

(concerning claim 2) the locking means further includes a plurality of balls (44, 46, 106) for tightly holding to said attaching means for releasably preventing said attaching means from being removed from said article;

(concerning claim 3) said locking means further includes a mechanical unlocking means (tool 60) for applying a mechanical force to release said balls from said attaching means whereby said attaching means may be released and detached from said tag body;

(concerning claim 4) said locking means further includes a magnetic unlocking means (120) for applying a mechanical force to release said balls from said attaching means whereby said attaching means may be released and detached from said tag body;

(concerning claims 5, 7 and 9) said locking means further includes a ball tightening and loosening means (22, 32, 36, 48) for tightening said balls to said attaching means; and said locking means further includes a mechanical unlocking means (tool 60) for applying a mechanical force to said ball tightening and loosening means for loosening said balls from said attaching means whereby said attaching means may be released and detached from said tag body; (concerning claim 7) said ball tightening and loosening means further includes a ball surrounding surface (tapered wall 24) defining a restrict space and an expanded space for forcing said balls into said restrict space for tightening said balls to said attaching means; and said mechanical unlocking means further applying a mechanical force to move said balls to said expanded space

Art Unit: 3677

of said ball tightening and loosening means for loosening said balls from said attaching means whereby said attaching means may be released and detached from said tag body; and (concerning claim 9) said ball tightening and loosening means further includes ball holding cup (retainer 32) having a plurality of holes (100, 102, 104) for each of said balls surrounded by said ball surrounding surface wherein said locking means pressing said ball holding cup for forcing said balls into said restrict space for tightening said balls to said attaching means; and said mechanical unlocking means further applying a mechanical force to move said ball holding cup together with said balls to said expanded space of said ball tightening and loosening means for loosening said balls from said attaching means whereby said attaching means may be released and detached from said tag body;

(concerning claims 6, 8 and 10) the locking means further includes a ball tightening and loosening means (22, 32, 36, 48) for tightening said balls to said attaching means; and said locking means further includes a magnetic (120) unlocking means for applying a mechanical force to release said balls from said attaching means whereby said attaching means may be released and detached from said tag body; (concerning claim 8) said ball tightening and loosening means further includes a ball surrounding surface (wall 24) defining a restrict space and an expanded space for forcing said balls into said restrict space for tightening said balls to said attaching means; and said magnetic unlocking means further applying a magnetic force (via magnet 120) to move said balls to said expanded space of said ball tightening and loosening means for loosening said balls from said attaching means whereby said attaching means may be released and detached from said tag body; and (concerning claim 10) said ball tightening and loosening means further includes a ball holding cup (32) having a plurality of holes (100, 102, 104) for each of said balls surrounded by said ball surrounding surface wherein said locking means pressing said ball holding cup for forcing said balls into said restrict space for tightening said balls to said attaching means; and said magnetic unlocking means further applying a magnetic force (via magnet 120) to move said ball holding cup together with said balls to said expanded space of said ball tightening and loosening means for loosening said balls from said attaching means whereby said attaching means may be released and detached from said tag body;

(concerning claim 11) a mechanical probe finger (tool 60) for pushing and applying a

Art Unit: 3677

mechanical force onto said locking means to release said attaching means whereby said attaching means may be released and detached from said tag body;

(concerning claim 12) a magnet (124) for applying a magnetic force onto said locking means to release said attaching means whereby said attaching means may be released and detached from said tag body;

(concerning claim 13) the security tag comprising an attaching means (14) for attaching said tag to a protected article further comprising: a locking means (22, 32, 36, 46, 48, 106) for locking said attaching means for releasably preventing said attaching means from being removed from said protected article wherein said locking means is provided to be unlocked for releasing said attaching means from said tag by one of at two different kinds (tools 60, 120) of unlocking means;

(concerning claim 14) the locking means is provided to be unlocked by a mechanical unlocking (60) and a magnetic unlocking means (120),

(concerning claim 15) a mechanical probe finger (tool 60) for pushing and applying a mechanical force onto said locking means to release said attaching means whereby said attaching means may be released and detached from said tag body;

(concerning claim 16) a magnet (124) for applying a magnetic force onto said locking means to release said attaching means whereby said attaching means may be released and detached from said tag body;

(concerning claim 17) said locking means further includes a plurality of balls (44, 46, 106) for tightly holding to said attaching means for releasably preventing said attaching means from being removed from said article;

(concerning claim 18) said locking means further includes a mechanical unlocking means (60) for applying a mechanical force to release said balls from said attaching means whereby said attaching means may be released and detached from said security tag; and

(concerning claim 19) said locking means further includes a magnetic (120) unlocking means for applying a magnetic force to release said balls from said attaching means whereby said attaching means may be released and detached from said security tag.

Concerning claims 20-26, Martens (280) further discloses a method for protecting an article by using an attaching means (12, 14) for attaching a security tag to a protected article (18)

Art Unit: 3677

further comprising: preventing said attaching means from being removed from said protected article by releasably locking said attaching means and unlocking and releasing said attaching means from said tag by either one of at two different kinds of unlocking means (tools 120, or 60);

(concerning claim 21) said step of locking said attaching means and then unlocking said attaching means by either of at least two different kinds of unlocking means further comprising a step of unlocking said attaching means by either a mechanical unlocking means and a magnetic unlocking means (via tolls 60, 120);

(concerning claim 22) said step of unlocking said attaching means by a mechanical unlocking means further comprising a step of applying a mechanical probe finger (60) for pushing and applying a mechanical force onto said locking means to release said attaching means whereby said attaching means may be released and detached from said tag body;

(concerning claim 23) said step of unlocking said attaching means by a magnetic unlocking means further comprising a step of applying a magnet (124) for applying a magnetic force onto said locking means to release said attaching means whereby said attaching means may be released and detached from said tag body;

(concerning claim 24) said step of releasably locking said attaching means further comprising a step of employing a plurality of balls (44, 46, 106) for tightly holding to said attaching means for releasably preventing said attaching means from being removed from said article;

(concerning claim 25) said step of unlocking said attaching means further comprising a step of employing a mechanical unlocking means (60) for applying a mechanical force to release said balls from said attaching means whereby said attaching means may be released and detached from said security tag; and

(concerning claim 26) said step of unlocking said attaching means further comprising a step of employing a magnetic unlocking means (120) for applying a magnetic force to release said balls from said attaching means whereby said attaching means may be released and detached from said security tag.

Art Unit: 3677

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Sandy whose telephone number is 703-305-7413. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ROBERT J. SANDY PRIMARY EXAMINER Page 7

Robert J. Sandy Primary Examiner Art Unit 3677